

# NASA TECH BRIEF



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## Cork Is Used To Make Tooling Patterns and Molds

### The problem:

To provide a suitable tooling pattern or mold material that is easily formed to any configuration and which possesses a desirable surface finish. The use of plaster, wood, or metal to make patterns and molds for prototype or limited production runs of resin laminates, foam dies, rubber and potting molds requires extensive time and machining equipment.

### The solution:

Sheet and waste cork material may be cemented together to provide the desired size and shape for the tooling pattern or mold.

### How it's done:

For tooling patterns which are substantially flat with minor contours, the sheet cork may be bent to the desired shape. For complex configurations such as cones, spheres, and cylinders, the cork may be cemented together to provide the proper rough configuration. The cork material is then sawed, cut, filed, and sanded to the desired finished shape and coated with a suitable mold release agent.

Room temperature vulcanizing resins are then poured into the cork form. When desirable, reinforced

laminates may be added during the application of the resin. After the resin is set or cured, the cork form is removed and the mold or pattern is ready for use.

### Notes:

1. The cork form will withstand moderately high temperatures under vacuum or pressure with minimum expansion, shrinkage, or distortion. Close tolerances may be obtained and the finished form is not easily broken, nicked, or scratched.
2. Inquiries concerning this invention may be directed to:

Technology Utilization Officer  
Manned Spacecraft Center  
Houston, Texas 77058  
Reference: B66-10328

### Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

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Category 05